**Africa RISING Survey: Legume productivity instrument**

* 1. **Draft Data Collection Tables**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **DISTRICT** | **EPA** | **FARMER NAME** | **GENDER** | **EXT OFFICER NAME** | **VILLAGE** |
|  |  |  |  |  |  |

* + 1. S**OIL AND FIELD CHARACTERISTICS DATA**

|  |  |  |
| --- | --- | --- |
|  | **SOYABEAN** | **G/NUTS** |
| Soil textural class (es) |  |  |
| Soil pH |  |  |
| Soil organic carbon |  |  |
| Soil organic nitrogen |  |  |
| C:N ratio |  |  |
| Soil NO3- |  |  |
| Soil NH4+ |  |  |
| Plot size (ha) |  |  |
| Previous crop grown |  |  |
| Soil temperature |  |  |
| Soil moisture |  |  |
| Technologies used | Ridge spacing (cm)…………………………………  Single row…………………………………………….  Double row…………………………………………..  Box ridges…………………………………………….  Number of seeds per station………………..  Space between stations (cm)………………… | Ridge spacing (cm)…………………………………  Single row…………………………………………….  Double row…………………………………………..  Box ridges…………………………………………….  Number of seeds per station………………..  Space between stations (cm)………………… |

* + 1. **CROP DATA**

|  |  |  |
| --- | --- | --- |
| **CULTIVAR** | **SOYABEAN** | **G/NUTS** |
| Variety |  |  |
| Seed source;  1st planting  Gap filling |  |  |
| Area planted |  |  |
| KGs planted |  |  |
| Date planted |  |  |
| Emergence date |  |  |
| Germination % |  |  |
| Gap filling date |  |  |
| Date of 50% flowering |  |  |
| Plant population @ 50% flowering |  |  |
| First yield estimate @ 50% flowering |  |  |
| (Good >90%, Average 70-90%, bad < 70%) | | |

* + 1. **HUSBANDRY/CULTURAL PRACTICES**

|  |  |  |
| --- | --- | --- |
| **FERTILIZER** | **SOYABEAN** | **G/NUTS** |
| Basal Fert used and Amount | Type…………………………………………………….  Amount (Kg)……………………………………….. | Type……………………………………….  Amount (Kg)…………………………………… |
| Date of basal dressing |  |  |
| Top dressing Fert and Amount | Type…………………………………………………..  Amount (Kg)………………………………………. | Type………………………………………  Amount (Kg)………………………………….. |
| Date of top dressing |  |  |
|  |  |  |
| **WEEDING** |  |  |
| Date & method of 1st weeding | Date………………………………........................  Method……………………………………………….. | Date………………………………..............  Method………………………………………. |
| Date & method of 2nd weeding | Date……………………………………………………..  Method………………………………………………. | Date…………………………………………….  Method………………………………………. |
| Date & method 3rd weeding | Date…………………………….........................  Method……………………………………………… | Date…………………………….................  Method………………………………………. |
|  |  |  |
| **PEST AND DISEASES** |  |  |
| 1st Scouting/inspection | Pests…………………………….........................  Control method……………………………………  Diseases……………………………………………….  Control method…………………………………… | Pest……………………………...................  Control method…………………………… Diseases………………………………………  Control method…………………………… |
|  |  |  |
| **2nd**Scouting/inspection | Pests……………………………........................  Control methods…………………………………  Diseases………………………………………………  Control methods………………………………… | Pest……………………………...................  Control method…………………………… Diseases………………………………………  Control method…………………………… |
| Stage of pest & disease attack | Vegetative…………………………………….  Flowering………………………………………  Pod forming………………………………….. | Vegetative…………………………………….  Flowering………………………………………  Pod forming……………………………… |
| Disease levels attack (%) | Severe %……………………………………….  Moderate%…………………………………….  Mild%………………………………………………. | Severe%……………………………………….  Moderate%…………………………………….  Mild%………………………………………………. |
| **INOCULATION** |  |  |
| Amount of inoculant | Amount (KG)………………………………………. | N/A |
| Severe >75% plants attacked, Moderate 40-75% plants attacked, mild 10-40%, 0-10% insignificant | | |

* + 1. **BNF ANALYSIS**

|  |  |  |
| --- | --- | --- |
|  | **SOYABEAN** | **G/NUT** |
| # of nodules formed/plant |  |  |
| Date of plant sample collection |  |  |
| Storage conditions of plant samples |  |  |
| Date of sample analysis |  |  |
| Method of BNF analysis |  |  |
| Amount of N-fixed |  |  |

* + 1. **YIELD COMPONETS & HARVESTING**

|  |  |  |
| --- | --- | --- |
|  | **SOYABEAN** | **G/NUTS** |
| Yield Est (2weeks prior to harvest) Kg/plot |  |  |
| Date of harvest maturity |  |  |
| Date of harvest (age) |  |  |
| Moisture content at harvest |  |  |
| Harvest method |  |  |
| Date of shelling |  |  |
| Condition of place for shelling |  |  |
| Method of shelling |  |  |
| Storage facility |  |  |
| Conditions of storage facility |  |  |

6.5.6 **SEED QUALITY**

|  |  |  |
| --- | --- | --- |
|  | **SOYABEAN** | **G/NUTS** |
| Purity | Freedom from non-seed particles……… | Freedom from non-seed particles………….. |
| Germination test (%) |  |  |
| Seed size | Small (%)………………………………………….  Medium (%)……………...……………………….  Big (%)………………………………………………… | Small (%)………………………………………….  Medium (%)……………...……………………….  Big (%)………………………………………………… |
|  |  |  |
| Good >90%, Average 70-90%, bad <70% | | |

* + 1. **CLIMATIC CHARACTRISTICS OF SITES 2016/2017 GROWING SEASON**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MONTH** | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY |
| **RAINFALL (mm)** |  |  |  |  |  |  |  |  |
| **TEMPERATURE (OC)** |  |  |  |  |  |  |  |  |